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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,753	08/10/2001	Thomas R. Fields	2025.29	6611

7590 10/27/2003

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EXAMINER

LAVILLA, MICHAEL E

ART UNIT PAPER NUMBER

1775

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,753

Applicant(s)

FIELDS, THOMAS R.

Examiner

Michael La Villa

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-108 is/are pending in the application.
- 4a) Of the above claim(s) 18 and 83-108 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5,7. 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Claims 1-82, in Paper No. 8 is acknowledged. Applicant has elected the following species: a fluoropolymer clear coat composition, a tin first discontinuous island layer composition, and an indium second discontinuous island layer. The traversal is on the ground(s) that searching both groups of claims would not constitute an undue burden and that imposing a restriction is unfair to the applicant and the public. This is not found persuasive because the proper search required for each groups of claims is not coextensive in view of the differences in classification. Applicant has provided no evidence to the contrary. Applicant's additional reasons for traversal pertain to fairness to the applicant and public when a restriction requirement is imposed. Fairness considerations are balanced by the policies that establish the current restriction practice procedure. Since applicant has not demonstrated that the imposed restriction is improper, these fairness considerations are deemed appropriately balanced.
2. The requirement is still deemed proper and is therefore made FINAL.
3. Claims 83-108 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8. It is further remarked that, of the elected claims, Claim 18 is not readable on the elected species.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
5. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1-82 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. Regarding Claim 5, it is unclear what is meant by the phrase "has a design."

Does this mean that the film is a design or that the film has a design applied to it.

II. Regarding Claims 14 and 15, it is unclear what is meant by the term "kind."

Does it require equivalence or some other degree of similarity?

III. Regarding Claim 24, it is unclear what is the antecedent basis of the phrase

"the discontinuous metal layers." Does this refer to all or to only the additional discontinuous layers?

IV. Regarding Claims 24, 25, 38, 39, 43, 44, 58, 69, 74, 80, and 81, it is unclear

what is meant by the relationship "opposite." The claims describe the relative

position of two layers as being opposite a third layer. Is this a shorthand for

saying, "on the side opposite to the side on which the third layer is positioned," or does it mean something else?

V. Regarding Claims 37 and 79, it is unclear whether the listed layers are

additional layers to those already defined in the earlier claim or whether the listed

Art Unit: 1775

layers describe the requirement that one of the these layers of the earlier claim must be tinted.

VI. Regarding Claim 66, it is unclear what is the antecedent basis of the phrase, "at least one said discontinuous metal layer." Does this phrase refer to all such layers or only to the inner layers?

VII. Regarding Claim 68, it is unclear what is the antecedent basis of the phrase, "said plurality of discontinuous layers metal island layers." Does this phrase refer to all such layers or only to the inner layers?

VIII. Regarding Claims 11, 24, 40-42, 50, and any others in which there is a mention of a "contiguous" relationship between layers, it is unclear whether layers being contiguous require direct contact with layers whose contacting surfaces are comprised of the claimed materials or direct contact with layers that are comprised of the claimed materials, or something else.

IX. Regarding Claims 1-82, it is unclear what is encompassed by the term "discontinuous layer of metal islands." Does this description imply any requirement of continuity to define the layer? Would a layer comprised of randomly oriented metal flakes, for example, be encompassed? Does this description entail a common continuous surface for the top and/or bottom of all of the metal island portions in a layer?

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1775

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1, 2, 4-8, 16, 17, 19, 25, 35-39, 43, 44, 48, and 49 are rejected under 35

U.S.C. 103(a) as being unpatentable over Murano USPA 2002/0108708.

Murano teaches coating a clear polymeric substrate with a first discontinuous metal layer and a second discontinuous metal layer. See Murano (Abstract; Figures 1 and 2; paragraphs 25, 28, 30, 31, 34, 46, 49, 50; and Claims). Murano does not exemplify a PVF or PVDF substrate film, but does teach that such films are effective. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a PVF or PVDF substrate film in the articles of Murano as Murano teaches that laminates formed from such substrate films are effective. Murano does not exemplify two discontinuous metal island layers formed of indium and tin as claimed, but does teach that such materials are effective for forming laminates having two discontinuous layers. It would have been obvious to one of ordinary skill in the art at the time of the invention to

Art Unit: 1775

fabricate the articles of Murano with two discontinuous metal island layers of the claimed materials in the claimed order of deposition as Murano teaches that such metal materials formed in these structures form effective laminates. Murano suggests that the first thermoplastic layer may be tinted. It would have been obvious to one of ordinary skill in the art at the time of the invention to tint the PVF or PVDF first thermoplastic layer as Murano teaches that effective layers in this position of the laminates of Murano may be tinted. Such tinted films may be deemed a design. Murano teaches that a third thermoplastic layer may be applied on the second discontinuous metal layer and that thermoplastic layers may be applied on discontinuous metal layers with an adhesive material. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply an adhesive layer prior to applying the third thermoplastic layer as Murano teaches that this is an effective method of applying a thermoplastic layer. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize any of the thermoplastic materials disclosed by Murano for the third layer, including those claimed, since these are described as effective by Murano.

Allowable Subject Matter

10. The subject matter of those claims not rejected over Murano, namely, Claims 3, 9-15, 18, 20-24, 26-34, 40-42, 45-47, and 50-82, is not taught or suggested by the prior art of record or the reviewed prior art for a clear coat comprised of a

Art Unit: 1775

fluoropolymer, a first discontinuous metal island layer of tin and a second discontinuous metal island layer of indium.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (703) 308-4428. The examiner can normally be reached on Monday through Friday.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.
13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Michael La Villa
October 19, 2003

